2 **Director's Column Connecting Update** 2 3 **New Developments** 4 **Construction Update** General Industry Update Consultation & **Training Update** 6 **Technical Information** 7 Vol. 13, No. 1 Winter 2009

Four Companies Fined \$162,000 for Worker Injury

MIOSHA concluded the investigation of a work accident at the Durant Hotel demolition/renovation project in Flint on Nov. 10, 2008. Four companies received MIOSHA citations alleging they failed to adequately protect employees from fall hazards, with proposed penalties totaling \$162,000.

Accident Investigation

On Sept. 9, 2008, Buckeye Construction Inc. of Caledonia had a crew of seven employees working on the seventh and eighth floor of the Durant Hotel project in Flint. The crew was removing debris and interior walls. William Keenoy Masonry Inc. of Lansing had a crew of five employees removing windows on the seventh and eighth floors.

While throwing debris through a window, a 23-year-old Buckeye Construction employee fell more than 80 feet out of a window opening that was not properly guarded. The employee landed on a debris pile on the ground, and survived the fall with multiple fractures and lacerations.

"The survival of this employee is nothing short of miraculous," said DLEG Deputy Director & Chief of Staff Susan R. Corbin. "When fall hazards are present – employers must provide the appropriate fall protection. We are sending a clear message to all construction employers that they are required to diligently protect their workers from the dangers of fall hazards."

Employer Responsibility

A typical construction site involves many contractors and sub-contractors, and the Durant Hotel project was no exception. On multi-employer sites, every employer has responsibility for the safety of all workers on the site, and more than one employer may be citable for the same condition.

The MIOSHA inspection determined there were four companies at the site that were aware of the unguarded window openings on the seventh and eighth floors and that

workers were exposed to the associated hazards. The contractors below were working at the site at the time of the fall accident:

- Buckeye Construction Inc. of Caledonia was the demolition contractor for this project.
- William Keenoy Masonry Inc. of Lansing was a demolition subcontractor.
- Prater Development Ltd. of East Lansing was the project manager at the site.
- Build Tech Ltd. of Lansing was the general contractor at the site.

"The investigation revealed that these four employers did not have a coordinated plan to protect workers against the multiple dangers found at this demolition/renovation site," said MIOSHA Director Doug Kalinowski. "Employers must diligently take the necessary measures to prevent these types of accidents."

MIOSHA Citations

MIOSHA concluded that the four companies at the site all had responsibility for the window opening hazards that resulted in the accident. Every employer was cited for failure to guard the window openings and for failure to guard the floor holes. Each of the contractors had a responsibility to implement requirements of MIOSHA Construction Standard, *Part*

45, Fall Protection, but didn't.

Construction Safety Standard, Part 20, Demolition, covers the demolition of structures and the safeguarding of the employees in these operations. The standard specifically requires an employer to make daily inspections to detect hazards and unsafe conditions, and to ensure employees are not permitted to work where hazards exist.

Buckeye Construction was cited for failure to use a material chute when removing debris material from the seventh and eighth floors.

The companies have appealed the citations.

Help is Available

In March 2008, MIOSHA initiated a proactive "Fall Protection" Campaign to help employers and employees understand fall hazards and appropriate fall protection and training. The goal is to increase awareness of fall hazards, to highlight the need for appropriate fall protection, and to help ensure that employees receive the training required by MIOSHA rules.

The MIOSHA Consultation Education and Training (CET) Division scheduled a series of workshops on fall awareness training across the state, which are posted on the CET Calendar on the MIOSHA website at www.michigan.gov/miosha. For more details on training opportunities, employers can contact the CET Division at 517.322.1809.

All MIOSHA standards are available on our website at www.michigan.gov/mioshastandards. For more information on construction standards, companies can contact the Construction Safety and Health Division at 517.322.1856.



A Buckeye Construction employee fell more than 80 feet out of a window, receiving multiple fractures and lacerations.

Fall Protection

Falls are one of the leading causes of fatalities in the construction industry. MIOSHA has investigated 53 fatalities over the 7-year period of 2002 - 2008 related to falls at construction worksites.

Almost all construction worksites have unprotected sides and edges, wall openings, or floor holes at some point during construction.

Part 1, General Rules, Rule 114 requires an Accident Prevention Program at every construction worksite which must address fall hazards. Part 45, Fall Protection, addresses minimum requirements and criteria for fall protection.

How to Avoid Hazards

- Use at least one of the following whenever employees are exposed to a fall of 6 feet or more above a lower level: Guardrail Systems; Safety Net Systems; Personal Fall Arrest Systems.
- Cover or guard floor holes as soon as they are created during new construction.
- For existing structures, survey the site before working and continually audit as work continues. Guard or cover any openings or holes immediately.
- Construct all floor hole covers so they will effectively support two times the weight of employees, equipment, and materials that may be imposed on the cover at any one time. Covers must be secured and color coded or marked with the words "HOLE" or "COVER."
- In general, it is better to provide fall prevention systems, such as guardrails, than fall protection systems, such as safety nets or fall arrest devices, because they provide more positive safety means.



Michigan Department of Labor & Economic Growth



Doug Kalinowski, CIH Director

Maintaining Workplace Safety & Health in Difficult Economic Times

Many employers in Michigan and across the U.S. are currently facing economic challenges that require finding ways to operate more efficiently than ever before. We often hear talk about cutting back on workplace safety and health and environmental programs as cost saving measures.

Just the opposite approach is the smarter one!! Although making sure that workers go home safe and tes and heart disease usually far surpass the price tags to prevent them.

In today's economy, many employers do not have a lot of influence over the fixed costs of the facility and manufacturing materials. However, the amount spent on work-related accidents, injuries and illnesses can often be greatly reduced.

Employers See Results

Many employers in Michigan have "figured this out!" Below are quotes from two outstanding, award-winning companies recently recognized for their success in reducing and/or eliminating injuries and illnesses.

The Pfizer Global Manufacturing's Gelfoam Ergonomics Team at the Kalamazoo site received the MI-OSHA Ergonomic Success Award on October 22, 2008, for ergonomic improvements that have significantly reduced repetitive motion injuries.

"Ergonomics is working at Pfizer! The idea is to make the work adjust

We're seeing solid benefits, not just in safety performance, but also in work efficiency and product quality." Robb Patterson, Pfizer

healthy is reason enough – the financial benefits to employers clearly solidifies the reasons to maintain and even strengthen safety and health systems during difficult economic times.

Think About These Facts

- Liberty Mutual Insurance Company estimates that between \$155 billion and \$232 billion are spent annually on workers' compensation in the U.S.
- Indirect costs such as training and paying replacement workers, repairing damaged property, scheduling delays, lost productivity, administrative expenses and negative customer and community relations can increase the direct costs by a factor of ten.
- Many studies have shown that for every \$1 invested in safety and health, a return of \$4 \$6 can be expected.
- A company with a workplace injury that totals \$50,000 typically must produce an additional \$2 million in sales just to cover this expense (assuming a 5 percent profit margin).

The costs of reacting to workplace injuries and illnesses far exceed the costs to prevent them from happening in the first place! This idea is no different when you think about nonwork-related illnesses. The costs to treat serious illnesses such as diabe-

to the worker, not make the worker adjust to the work," said Robb Patterson, Pfizer Ergonomist and EHS & Ergonomics Manager. "We're seeing solid benefits, not just in safety performance, but also in work efficiency and product quality."

Acument Global Technologies – Holly Operations Gainey Drive facility received the MIOSHA Michigan Voluntary Protection Program (MVPP) Star Award on June 20, 2008, for an excellent safety and health management system.

"The Gainey Drive facility has gone more than 3.5 years without a lost-time accident," said **Jim O'Dea**, Acument Michigan Region, Director of Operations. "This astounding record has a direct impact on our production and quality."

Focusing on workplace safety and health creates a win-win business strategy:

- Lives are saved.
- Employers maximize returns on investment.
- Safe workplaces are productive workplaces.

The MIOSHA Consultation Education and Training (CET) Division offers free statewide assistance to help employers develop effective safety and health systems that protect their workers. The CET Division can be reached at 517.322.1809.

Customer Survey Provides Valuable Feedback

Our goal is to provide useful information on workplace safety and health issues via our staff, print materials and website.

To assess how well we are doing, we asked our customers. Customer surveys were distributed from April through September 2008. Surveys were handed out by staff, included in mailings, and posted on the MI-OSHA website. A total of 585 of our customers completed the survey and the results are very positive.

Customer Service Goal

This is our second customer survey. Previously a survey was conducted in 2002 as part of the first MIOSHA Strategic Plan. The second strategic plan continued the emphasis on customer service by setting a goal that: "90 percent of employers and workers receiving a MIOSHA intervention rate their experience as useful in identifying and correcting workplace hazards and exposures."

MIOSHA surpassed that goal with a positive response rate of almost 94 percent which compares favorably to the 86 percent we received in 2002. The percent of positive responses for the two surveys are illustrated in the chart below.

Customer Survey Suggestions

In addition to the completed surveys, 41 pages of comments were received.

Many comments suggested expanding the information available on MIOSHA's website and improving the ease of locating information. In response, we have completed a review of the "Frequently Asked Questions" and are working to refine



Martha Yoder Deputy Director

the location and format of standards interpretations and "Ask MIOSHA" responses.

Additional comments suggest a need to collaborate between consultation and enforcement to ensure consistency. Other comments suggested a desire for more training materials and programs available on the web, more seminars for the public, and more issue specific information.

Many surveys included comments on the service and information received from MIOSHA staff. Comments like "very helpful," "good advice on my questions," "treats you with respect," "professional," and "courteous," were common among the feedback from our customers.

Continue to Provide Feedback

We value and appreciate all the feedback that we have received. We give you our commitment to work diligently to address the suggestions for improvement and to continue our efforts to "Connect MIOSHA to Industry" through a collaborative, informative approach to MIOSHA visits.

Please continue to provide us your thoughts and suggestions.

Customer Survey: 2002 & 2008 Comparison

2002 % Useful	2008 % Useful	Question		
90.3	94.9	How accessible is MIOSHA information?		
89.5	92.3	How applicable are MIOSHA rules to safety and health issues you deal with in your workplace?		
82.1	89.9	How satisfied are you that MIOSHA programs and services are effective in identifying and correcting workplace hazards and exposures?		
85.3	92.1	How professional are MIOSHA staff in carrying out their duties?		
85.6	93.8	How useful is MIOSHA safety and health information in preventing serious workplace injuries and illnesses?		
80.8	90.9	How confident are you that MIOSHA brings about improvement in workplace safety and health?		
87.8	93.2	How knowledgeable do you believe MIOSHA staff are in carrying out their duties?		
91.2	93.7	How willing are you to rely on information provided by MIOSHA for workplace safety and health solutions?		
79.8	89.1	Do MIOSHA representatives address your concerns to your satisfaction?		
79.7	88.5	How do you rate the overall quality of MIOSHA programs and services?		

New Emphasis on Safety and Health Management Systems

Effective management of worker safety and health protection is a decisive factor in reducing the extent and the severity of work-related injuries and illnesses. The best Safety and Health Management Systems (SHMS) involve every level of the organization, instilling a safety culture that reduces accidents for workers and improves the bottom line.

The new MIOSHA Strategic Plan for 2009-2013 increases MIOSHA's ongoing emphasis on evaluating a company's efforts to develop and implement a safety and health system that fits the specific work environment.

Promoting Systems

As part of the new plan, MIOSHA staff will promote development of a site-specific safety and health management system as a part of every contact with employers. This may include discussions of what is appropriate for the size of the workplace; the specific type of work, hazards, processes, and equipment present; and the past experience of the workplace.

Promotion may also include the offer to provide training on the elements of a successful system, a walk through to help evaluate the existing system, or a review of existing documents. Print or web materials and information may also be provided or reviewed.

It is our goal that when a MIOSHA staff person leaves a workplace, a clear message has been left that safety and health systems are crucial to creating an environment that protects the health and safety of the workers.

Evaluating Systems

In general industry, a review of safety and health system components will be completed as part of ev-

ery enforcement comprehensive inspection and as part of consultation hazard surveys.

In construction, SHMS system efforts will be evaluated when an inspection results in a recommendation for three or more proposed serious, willful or repeat violations. Additionally, an evaluation may be conducted on inspections of a serious accident or fatality. Construction consultants will complete a SHMS evaluation as part of a site hazard survey.

An employer will be informed that a SHMS evaluation will be completed as part of the visit during the opening conference for enforcement interventions or at the beginning of the CET survey.

All MIOSHA staff will use the same evaluation form to assess the company's system, based on: personal observations of the work being performed, documentation reviewed, conditions in the facility, and responses to employee and management interviews.

For employers who do not meet the criteria for an evaluation to be completed, the evaluation form will be left with the employer for their use in completing a self-evaluation.

Providing Evaluation Tools

MIOSHA has created a new Agency Instruction (MIOSHA-ADM-08-2: Promotion and Evaluation of Safety and Health Management Systems) to guide program activities. This instruction contains evaluation tools for assessing SHMS efforts in general industry and in construction.

In addition, the document includes two excellent attachments that provide assessment tips for general industry and construction. This information, along with the evaluation forms, are available on the MIOSHA website at www.michigan.gov/miosha, click on left link "Policies and Procedures" and then "Search for Instructions."

Employers are encouraged to use the information and evaluation tool to proactively complete a self-assessment. Completing a self-assessment can help determine whether your current efforts address all components of an effective system.

The assessment tips may provide useful ideas for addressing areas where gaps are identified. In addition, employers are encouraged to contact the CET program at 517.322.1809 to receive onsite assistance from a consultant.



Acument Global Technologies' Gainey Drive Operations, an MVPP Star Site, has an effective SHMS.

MIOSHA Announces \$1 Million for Worker Protection Grants

On Oct. 29, 2008 MIOSHA awarded 20 **Consultation Education and Training (CET) Grants** totaling \$1 million to promote worker safety and health.

Maximizing Safety & Health

"Our 'Best-of-the-Best' Michigan employers have found that protecting their workers is one of the most effective ways to increase productivity

The control of these (MA) N (MA) I was a state of the control of t

CET Grant announcement at FH Martin Constructor's retail development project in Macomb Township.

and profits," said MIOSHA Director Doug Kalinowski. "These CET Grants will provide companies with strategies that can help them create a safe and healthy work environment."

Director Kalinowski made the announcement at FH Martin Constructor's retail development project in Macomb Township. The Construction As-

sociation of Michigan (CAM) is one of the CET grantees, and will provide safety and health training to the workers at FH Martin's worksite. Five other CET Grant recipients will provide training to construction workers.

"I'm proud to note this is the 35th new store/project FH Martin has completed for **The Kroger Company**. Despite what we hear in the news, there is still investment being made in this region," said **FH Martin President R. Andrew Martin, Jr.** "It is FH Martin's goal that every worker at this site will return home safely to their loved ones every night."

"These tough economic times give business owners plenty to

think about. With this grant we hope to lessen that burden by bringing quality safety training directly to the jobsite," said CAM President Kevin N. Koehler.

Working Collaboratively

The Consultation Education and Training (CET) Division provides outreach services to employers in a variety of formats. The 20 CET Grant organizations will provide additional outreach efforts and options for safety and health education and training.

Most of the grants will focus on the performance goals identified in the new FY 2009 – 2013 MIOSHA Strategic Plan. Strategic training topics include: emergency planning and response, workplace violence prevention, firefighter rescue, long-term care, asbestos awareness, ergonomics, youth safety, road construction, and fall protection.

For many years the CET Grants have increased the awareness of safety in the workplace. The FY 2009 CET Grants will continue MIOSHA's commitment to greater training of safety practices and fewer workplace injuries, illnesses, and fatalities.

More information and a complete list of the FY 2009 CET Grant Projects is available on our website www.michigan.gov/miosha. Click on the left link "Consultation, Education & Training" and then on "Grant Program."

Bob Pawlowski, CIH, CSP, **Director, Construction** Safety & Health Division 517.322.1856

Electrocutions: No Second Chances

By: Patty Meyer, CSHD Safety & Health Manager

Although construction work was slower in Michigan last year, there were still three electrocution fatalities on construction sites. The Construction Safety and Health Division investigates electrocution fatalities at least twice a year - mostly from contacting overhead power lines.

June 2008 – 47-Year-Old Laborer

A laborer was attaching a chain onto an excavator bucket during a sewer installation project. The sewer pipes were stored near 7200 volt power lines. The operator swung the boom towards the power lines and the laborer was electrocuted. The employees knew the powerlines were there and were instructed to maintain at least 10 feet away from them. The employer was cited for not maintaining the proper clearances from the energized power lines.

June 2008 - 45-Year-Old Lineman

A lineman removed a transformer arrestor while installing a new 15KV switch on a 7200 volt powerline. The victim didn't remove the stinger wire that would have de-energized the transformer. He took his protective rubber gloves off to remove the bolts on the arrestor and was electrocuted when he grabbed onto the bolts. The employer received two citations for not inspecting the jobsite, and not requiring protective rubber gloves or de-energizing the equipment.

September 2008 – 44-Year-Old Owner/Operator

The owner/operator of a poured concrete wall company was moving a truck crane on a jobsite. The crane boom was not properly secured down and snagged a telephone line, snapping one of the power poles. A 7200 volt power line fell onto the crane and caught it on fire. The victim was electrocuted while trying to extinguish the fire. The company received citations for not following manufacturer's recommendations for securing the boom, not reporting a fatality, no crane inspections or manual, and training.

Sometimes making a mistake can be a good learning opportunity, but mistakes around power lines is not one of those times - it could get you killed.



An owner/operator was electrocuted while moving a truck crane at this jobsite.

Determining the Employer

By: Bob Pawlowski, CSHD Director

During an inspection, MIOSHA must establish an employer/employee relationship. We review contracts and written documents, and conduct interviews to determine the working relationships.

Who is an Employer?

There are a number of questions asked to determine whether an employer/employee relationship exists, but not all the categories below must be met.

- Who provides direction to individuals (supervises) for work activity?
- Who provides wages to individuals for work performed?
 - Who has hire/fire authority?
- Who establishes the hours of work/schedule of work progress?
- Who provides materials/ equipment?
- Who provides worker's compensation insurance?

Some Recent Determinations

A building owner contracted with a heating and air conditioning contractor to install an air MIOSHA had no enforcement auconditioning unit. The contractor was considered the employer have protected the volunteers.



thority at this scaffold fatality, but following MIOSHA rules would

because they scheduled when employees could work on the project, provided direction at the worksite, and paid employees for the work. The building owner was not considered an employer.

A foreman of a construction contractor stated he was not the employer because the workers were "independent contractors" and were provided IRS 1099 forms. As an agent of the contractor, the foreman provided direction at the worksite, determined who worked, and established work

> hours. Even though the employees' pay came from a construction management company, the contractor was determined to be the employer. How federal taxes are paid did not impact the employer/ employee relationship.

> MIOSHA responded to a scaffold collapse fatality where volunteers were installing siding on a church. The church provided materials and some tools. Direction was initially provided by a volunteer parishioner. The church and the parishioner were not considered an employer because there was no overall direction, no establishing work hours and no remuneration.

Cranes – Safe Operation

Since 2003, the Construction Safety and Health Division (CSHD) has investigated at least 14 crane accidents, resulting in one fatality, at least six serious injuries and untold hundreds of thousands of dollars in property damage.

Construction Safety Standard Part 10, Lifting and Digging Equipment, delineates employer and employee requirements for the use of cranes including operator training, operator conduct, signals, crane inspections, wire rope inspection, rating capacities, and work platforms used with cranes.

MIOSHA Part 10 Rules that Apply:

Rule 1004a (11) requires crane inspections must be conducted by a Qualified Person.

Rule 1006a (1) requires the employer to comply with the manufacturer's specifications.

Rule 1008a requires the employer to assure that a prospective operator has been thoroughly trained.

Rule 1009a requires the employer to ensure an employee has adequate knowledge of, and is capable of operation, before assigning an employee to operate a crane, derrick or excavation equipment.

Rule 1012a requires the employer to conduct frequent and periodic inspections.

MIOSHA has developed three documents to help employers perform inspections. These documents and a "Cranes – Safe Operation" fact sheet are on the CSHD web page.

LABORER – STRUCK BY FATALITY

In April 2008, a 37-year-old laborer was working in a manhole removing excess pipe. He tied a 40-foot long rope to the material and a boom-truck crane. When the crane put tension on the load-line the material suddenly released, fatally striking the employee.

MIOSHA violations (not inclusive):

- Part 1, General Rules Rule 114(2) (b), Training on release of stored energy.
- Part 10, Lifting and Digging Equipment, Rule 1005a (3) – Ascertain the weight of the load before lifted.
- Part 10, Rule 1009a Ensure the employee has adequate knowledge of, and is capable of properly operating the crane.
- Part 1, Rule 132 (3) Not having a first aid trained person at the jobsite.

CASE SUMMARIES

ELECTRICAN – STRUCK BY FATALITY

In July of 2008 a 55-year-old electrician was installing a speaker system from a scissor lift when a bridge crane struck the lift, knocking over the lift and worker. The employee landed on steelbar storage racks resulting in fatal injuries.

MIOSHA violations:

- Part 1, General Rules, Rule 114(2) (b) Instruction on operating procedures and hazards of the equipment.
- Part 1, General Rules, Rule 114(2) (c) Inspection of the construction site, tools and equipment, for unsafe conditions.
- Part 32, Aerial Work Platforms, Rule 3207(8) - No permit and training provided for operating of an aerial work platform.

GENERAL INDUSTRY UPDATE

Severstal Fined \$679,890 for Failure to Protect Workers

By: Eva Hatt, GISHD Safety and Health Manager

In November 2008, Severstal Inc. of Dearborn received 152 MIOSHA citations alleging they failed to adequately protect employees from serious safety hazards, with proposed penalties totaling \$679,890.

MIOSHA compliance inspections target establishments with high injury/illness rates and a high incidence of lost workday cases. The intent is to identify hazardous conditions, so they can be corrected before injuries and illnesses occur.

MIOSHA Investigation

Severstal North America, Inc. is the fourth largest integrated steelmaking company in the U.S. and employs about 2,000 workers. In the past three years, MIOSHA enforcement officers have conducted 19 investigations at the Severstal Dearborn facility (3001 Miller Rd.).

A 39-year-old Severstal supervisor was fatally injured on January 11, 2008, while he was cleaning a belt conveyor on a catwalk and fell approximately 11 feet to the floor below. Following the MI-OSHA investigation, the employer was cited with two rule violations.

On January 28, 2008, two safety On January 28, 2008, two safety officers were assigned an employ-

ee complaint investigation. Due to the number of additional employee complaints, union concerns, outside referrals, and the recent fatality, a partial wall-to-wall inspection was performed in the blast furnace area.

Summary of Violations

There were 152 violations found during the inspection: 102 Serious, 12 Repeat-Serious, and 38 Other-than-Serious. There were multiple instances of the same violation throughout the blast furnace process area. Some of those violations included:

- Unsecured slag pots in yard area leaning and falling over.
- Multiple instances of employees not wearing fall protection at elevated heights.
 - Unapproved hoses used for gas lines and multiple gas leaks throughout the area.
 - Large accumulations of water where molten metal is poured exposing workers to explosion hazards.
 - Unguarded or inadequately guarded floor holes, wall openings, and conveyors.

The citations are under employer appeal.



Payment for Personal Protective Equipment

Many employees are required to use personal protective equipment (PPE) during the course of their workday whether it is safety glasses, hard hats, steel tood boots, or safety harnesses. But what may unclear, is who is required to pay for the required equipment and their maintenance and or

Who Pays? Rule 3310 of Part 33, Personal Protective Equipment, clearly gives this responsibility to the employer "at no expense to the employee" unless specifically indicated otherwise in a MIOSHA standard. (For example, Rule 3385 states the payment for protective footwear shall be determined between the employer and the employee or collective bargaining agreement.)

The standard also says "the employer shall also provide replacement equipment if necessary due to wear and tear on the previous equipment or if the equipment is lost due to the work environment, unless covered by a collective bargaining agreement."

Must It Be Used? Rule 3310 also stipulates that not only should the personal protective equipment be supplied to employees, but it states an employee "shall use all of the personal protective equipment provided by the employer." The employer has the responsibility to enforce the rule and ensure the employee properly uses the provided PPE.

To obtain copies of MIOSHA standards, visit our website www.michigan.gov/mioshastandards.

CASE SUMMARIES

MAINTENANCE WORKER - FALL FATALITY

In April, 2008, an employee went up on the roof of a building to open a flue. The employee stepped on a portion of the roof that could not support his weight. He fell to the concrete floor about 30 to 40 feel below, landing on his head. He was transported to the hospital where he was pronounced dead.

MIOSHA violations:

- Part 1-4081.0021(4) General Provisions - The bakelite roof was not rated to hold the weight of a person.
- Part 33-4081.3390(1) Personal Protective Equipment - Employee was not protected from a fall by being provided with a safety belt or safety harness secured to a lifeline or structure.

PIPEFITTER - EXPLOSION FATALITY

In January of 2008, three employees were working on a 54-inch pipe outside the blast furnace area. They climbed onto the pipe and tied off with safety harnesses and lifelines. They were drilling into the pipe line, when an explosion occurred causing one employee to be blown backwards with tremendous force causing severe injuries resulting in death.

MIOSHA violations of Part 85, The Control of Hazardous Energy Sources:

- Rule 1910.0147(d)(5)(i) Piping not adequately bled and/or purged.
- Rule 1910.0147(c)(4)(i) No lockout devices affixed to the energy isolating valves on sections of the coke oven gas piping line prior to drilling.
- Rule 1910.0147(c)(7)(i)(a) Inadequate lockout training.

John Brennan, Director **General Industry Safety** & Health Division 517.322.1831

Don't Become a Statistic

By: John Brennan, GISHD Director

MIOSHA is reminding employers and workers that workplace deaths can be prevented.

As of December 22, 2008, there have been 36 program-related fatal workplace accidents in Michigan. Twenty-two of these accidents have been employees that were performing general industry activities. The 22 program-related fatalities is an increase from last year. The end of year total for 2007 was 20 for general industry.

Employers have a legal obligation to provide a safe and healthy work environment. The MIOSH Act requires employers to provide "a workplace free of recognized hazards that are likely to cause death or serious physical harm to the employees."

2008 General Industry Fatalities

- Six involved falls from heights: working on an extension ladder; cutting down a tree; performing maintenance on a roof; checking the hopper on top of a railcar; fighting a fire on the second story; and working on an unguarded platform.
- Four involved caught in/between machinery or equipment: crushed between a dock plate and pit; crushed by a coil of steel; crushed between top and bottom bolsters; and caught by a revolving mill head.
- Two each involved: electrocutions; not using power lock-out; powered industrial trucks; and pinned underneath equipment.
- One each involved: being struck by a tree while tree trimming; burns from a broken steam line; working in an oxygen-deficient controlled room; and failure of equipment while adding air pressure.

MIOSHA urges proactive attention to safety and health diligence in all workplaces. Fatal accidents can be prevented when employers develop and implement safety and health management systems. These systems include not only following MIOSHA rules, but emphasize management commitment, employee involvement, worksite monitoring, and training. Effective work safeguards must be applied at every worksite.

A fact sheet on the 2008 general industry fatalities is available on the MIOSHA News web page at www.michigan.gov/mioshanews.



A 28-year-old maintenance worker died when this 54-inch gas pipe he was repairing exploded.

Connie O'Neill, Director Consultation Education & Training (CET) Division 517.322.1809

New Construction MVPP Program

By: Sheila Ide, CET Supervisor

In an effort to recognize even more premier employers who have created safety and health management systems that are considered the "best of the best," MIOSHA is working with construction industry representatives to create the Michigan Voluntary Protection Program for Construction (MVPPC).

MVPP has been in existence since 1998 in Michigan for general industry. Currently 28 companies proudly carry this designation. Companies who qualify for the MVPP must show superior commitment, proof of outstanding programs, and injury and illness (I&I) rates at or below the industry average.

The Challenges

The challenges of administering a construction company MVPPC differ from a fixed site general industry business. These include:

- Determining who can apply and in what capacity;
- How a controlling contractors' subs will be affected;
- How many on-site audits will be necessary and at what stage of construction;
- How would an MVPPC specialty contractor protect their workers on a non-MVPPC site;
- Does the designation apply company-wide on several projects,

geographically or on a fixed project of long duration;

- Could a company achieve MVPPC at the start of a new project based upon past experience;
- How will the three years of I&I data be determined and what statistics will be required.

The Rewards

Several construction companies have proven their ability to effectively reach I&I rates below the national average in a very hazardous industry. Currently partnerships are available for construction companies for fixed site projects and these partners believe they are ready for the next step.

Construction partnerships, similar to the MVPP, require a company to have programs in place, and prove they are working. There is a strong component of trust and cooperation between MIOSHA and the company.

In the MVPPC, MIOSHA confirms, through a company's written programs, procedures and onsite evaluations, that the company is truly "walking the talk." Successful candidates must demonstrate their commitment to a safety and health management system by holding themselves, their sub-contractors and workers to the same high quality standards.

In return, MIOSHA releases a MVPP company from scheduled inspections and acknowledges their accomplishment.



Industry representatives work with MIOSHA to develop the MVPP for Construction.

MIOSHA News Quiz

Topic: Equipment Use at Construction Sites

Try your luck with the MIOSHA News Quiz!

The quiz is written by MIOSHA safety and health professionals and topics cover a wide range of safety and health issues. The quiz is available at www.michigan.gov/mioshanewsquiz.

MIOSHA Awards

MVPP & SHARP Awards

10/09/08-Herman Miller Main Site Operations in Zeeland-MVPP Star Award. Herman Miller's corporate mission is to create great places to work. A key element of their mission is to create a safe work environment for employees. Main Site employs 950 workers and manufactures work surfaces and office systems furniture components.

11/14/08–Monsanto Constantine Operations –MVPP Star Award. Worldwide Monsanto is committed to an injury-free work environment. The Constantine facility employs 53 workers and 300 seasonal workers, and produces 2.0 million bags of hybrid seed corn annually. Monsanto is an agricultural company that improves farm productivity.





Employer Honor Roll

07/11/08-InterAmerican Zinc of Hastings-Ergonomic Innovation Award

10/22/08-Pfizer Gelfoam Team of Portage-Ergonomic Success Award

11/12/08-ADAC Automotive of Muskegon-Ergonomic Innovation Award

The press releases for all MIOSHA Awards are available on our website: www.michigan.gov/miosha. On the home page, click on "Publications, Forms & Media," and then click on "Press Releases."

The CET Division recognizes the safety achievements of Michigan employers and employees through various awards, based on excellent safety and health performance. For more information, please visit our website.

The Safety Perception Survey Just what DO your workers think about safety?

Jim Getting, Ph.D., CET Construction Safety Consultant

Safety is tough to measure.

If you do not have an accident this year, is it luck or is your safety program finally starting to gel? One effective measurement tool is a Safety Perception Survey. This is a questionnaire filled out by workers at all levels to determine what they think about various aspects of your safety program.

Workers anonymously answer questions like "top management is committed to safety," or "everybody receives adequate safety training." Questions are designed to tap into aspects of the safety program such as training, planning, and communication.

Results reveal much useful information.

Often, gaps show up between management and workers. Things may not be as great as management thought. It also identifies areas of excellence and areas of weakness.

This makes a Safety Perception Survey a great tool for safety directors and safety committees. It provides direction for improvement and starts the process of receiving input and ideas from workers. Another great use of Safety Perception Surveys is to gauge improvement and determine if investments in new safety initiatives are worthwhile. Results of the first survey can be compared to another survey in the future.

A word of caution.

It is important that the process be used to learn and improve. If questions are poorly written or results are not acted upon, the survey may reveal little or may serve to worsen perceptions of the safety program. If you're interested in learning more about Safety Perception Surveys, please contact the CET Division.

Ask MIOSHA

Recordkeeping

Question: How does MIOSHA define a "company parking lot" for purposes of recordkeeping?

Answer: Company parking lots are part of the employer's premises and therefore part of the establishment. These are areas under the control of the employer, i.e. those parking areas where the employer can limit access (such as parking lots limited to employees and visitors). On the other hand, a parking area where the employer does not have control (such as a parking lot shared by different employers, or a public parking area like those found at a mall or a multi-employer office building) would not be considered part of the employer's establishment (except the owner of the building or mall), and therefore not a company parking lot for purposes of MIOSHA recordkeeping. (Rule 408.22110)

Question: I have a client and they are located in Indiana. They have employees who travel from Indiana to Michigan to complete work on different job sites. If there is a fatality or catastrophic incident, is the incident reported to Michigan since this is where it happened or Indiana since the company is located in Indiana?

Answer: The fatality should be reported to Michigan. In Michigan, call the MIOSHA Fatality Hotline at 800.858.0397 to report a fatality or catastrophe. Michigan requires that all workplace deaths be reported – even those that appear to be heart attacks. Fatalities and catastrophes must be reported within 8 hours of the incident or when the employer became aware of the incident. (Rule 408.22139)

Fatalities must also be logged on the employer's log. If the employee is injured or becomes ill and is not at one of your establishments, you must record the case on the OSHA or MIOSHA 300 log at the establishment at which the employee normally works. If the injury or illness occurs at one of your establishments, you must record the injury or illness on the MIOSHA 300 log of the establishment at which the injury or illness occurred. (Rule 408.22130)

Recordkeeping Reminder

Michigan employers are required to post the total number of job-related injuries and illnesses that occurred in 2008.

Employers must post the *MIOSHA Form 300A* (Summary of Work-Related Injuries and Illnesses) for three months, from February 1 to April 30, 2009.

www.michigan.gov/recordkeeping

Variances

Variances from MIOSHA standards must be made available to the public in accordance with Part 12, Variances (R408.22201 to 408.22251). MIOSHA variances are published in the MIOSHA News website: www.michigan.gov/mioshavariances

Jim Gordon, Director Appeals Division 517.322.1297

The MIOSHA Appeals Division oversees the settlement of cases where citation(s) have been issued.

John Peck, Director Management & Technical Services Division 517.322.1851

Standards Update

Status of Michigan Standards Promulgation

General Industry Safety Standards Commission

■ GI Part 74, Fire Fighting, an advisory committee was appointed to update this standard.

Construction Safety Standards Commission

- CS Part 2, Masonry Wall Bracing, an advisory committee is drafting revisions to update the standard.
- CS Part 10, Lifting and Digging Equipment, an advisory committee is considering crane operator certification.
- CS Part 29, Communication Towers, an advisory committee drafted a new standard. A public hearing was held July 15, 2008, to receive comments; the comments are being reviewed.

Occupational Health Standards Commission

- OH Part 301, Air Contaminants in General Industry, and OH Part 601, Air Contaminants in Construction, draft language has been prepared to add air contaminant limits for hexavalent chromium (Cr6+) and diisocyanates, and to change air contaminant limits for ammonia and coal dust, and update standard. A Request for Rulemaking has been approved by the State Office of Administrative Hearings and Rules (SOAHR).
- OH Part 316, Diisocyanates, an advisory committee drafted a new standard. A Request for Rulemaking has been approved by SOAHR.
- Latex Advisory Committee, an advisory committee is reviewing hazards related to occupational use of latex, particularly latex gloves for personal protective equipment.

Construction Safety Standard Part 10, Lifting and Digging Equipment

The Construction Safety Standards Commission appointed an advisory committee and charged them with considering crane operator certification due to several fatal crane accidents that had occurred nation-wide. Updating existing protections and requiring crane operators to be trained in the use of construction cranes may both help to protect construction employees and to prevent crane accidents.

The Lifting and Digging Equipment Advisory Committee consists of nine management representatives from small and large businesses and eight labor representatives. The advisory committee is meeting monthly and is focusing its attention on reviewing proposed OSHA standard §1926.1427 Operator Qualification and similar standards from several states.

Michigan Injury and Illness Data for 2007

Each year, the Bureau of Labor Statistics (BLS), U.S. Department of Labor, compiles and publishes injury and illness (I&I) data for the nation and for many states. MIOSHA staff send surveys to selected Michigan businesses to obtain their I&I data. Industry-wide injuries, illnesses, and rates are projected from the responses to the BLS survey.

MIOSHA uses the data to identify industries that have above average rates to target in our strategic planning activities. MIOSHA has just concluded the fifth year in our second

five-year strategic plan covering FY 2004-2008.

MIOSHA exceeded the goal of 20 percent reduction over five years in the total recordable case rates for selected industries. (See chart below for I&I rate reductions.)

If you want to learn more about Michigan illnesses, injuries and incidence rates, or about I&I data for the nation or other states, you can locate current and historical data at the BLS website www. bls.gov. Michigan-specific data and recordkeeping requirements are located at www.michigan.gov/recordkeeping.

Comparison of Michigan TRC Rates¹ for MIOSHA Strategic Plan Industries²

Industry	Baseline 2001	2007 IR	Percent Change
All industries, including state & local govt.	7.2	4.9	-32%
Private industry	7.3	4.9	-33%
Construction	8.9	5.8	-35%
Manufacturing	12.3	7.1	-42%
Primary metal manufacturing	12.0	8.4	-30%
Fabricated metal manufacturing	15.3	8.9	-42%
Machinery manufacturing	15.1	6.3	-58%
Transportation equipment manufacturing	15.1	8.2	-46%
Furniture and related product manufacturing	12.9	5.1	-60%
State government	4.1	3.2	-22%

 1 The total recordable case rates represent the number of injuries and illness per 100 full-time workers.

² The industries listed are for MIOSHA's Strategic Plan for FY2004-08.

MIOSHA TRAINING INSTITUTE

MTI Compliance Certification: Sample Course

What's Covered in a Level II Class?

Level II MTI Compliance certification for general industry provides in-depth, technical training on MI-OSHA standards. Students are required to take seven core classes and one elective (see below). Course descriptions are available on the MTI web page.

The training is comparable to what is provided to new MIOSHA professional staff. Participants in standards courses begin learning before attending by reviewing the specific rules covered. This sample course outline will give students an idea of the in-depth learning provided.

The *Part 380, Occupational Noise Exposure and Hearing Conversation,* class was piloted in June and October 2008. This course is a one-day class and registrants are required to take an on-line pre-test. The purpose is to familiarize all students with Part 380.

Level II: Compliance Certification

Required	Electives (Select 1)
Part 92 - S	Part 380 - H
Parts 472 & 554 - H	Part 21 - S
Parts 2, 3 & 4 - S	Part 14 - S
Parts 39 & 40 - S	Part 451 - H
Parts 1 & 7 - S	Part 24 - S
Part 85 - S	Part 90 - S
Parts 33 & 433 - S&H	

S: Saftey Standard, H: Health Standard.

MTI website: www.michigan.gov/mti

Key Learning Objectives

- Define and measure noise.
- Identify causes of hearing loss.
- Explain the requirements of Part 380.
- Use monitoring equipment to determine the level of sound and interpret monitoring results.
- Discuss noise control technologies and when they are required.
- Determine and record standard threshold shifts (STS).
 - Select appropriate hearing protection.

Lab Activity

Hands-on learning is a key feature of MTI courses. In this class, students use the same noise dosimeters and calibrators provided to MIOSHA staff. Students calibrate and setup data logging for the dosimeters and practice using them in stimulated work scenarios and monitoring results.

During the course, MIOSHA instructors give examples of specific applications and interpretations of Part 380.

Pilot Classes Student Evaluations

- 93 % said the information was relevant.
- 100 % said the materials were useful.
- \blacksquare 100 % said that the class was designed to help them learn.
- 100 % said they were able to practice the skills taught in class.
- 85 % said the information will be useful in their work

A complete offering of Level II courses throughout the state is planned for 2010.



Director: Douglas J. Kalinowski Deputy Director: Martha B. Yoder Editor: Judith M. Shane

MIOSHA Hotline: 800.866.4674 Fatality Hotline: 800.858.0397 General Information: 517.322.1817 Website: www.michigan.gov/miosha

The Mission of the MIOSHA Program is to Help Assure the Safety and Health of Michigan Workers.

The MIOSHA News is a publication of the MIOSHA program. Its purpose is to educate Michigan employers and employees about workplace safety and health and we encourage reprinting.

DLEG is an equal opportunity employer/ program. Auxiliary aids, services and other reasonable accommodations are available upon request to individuals with disabilities.

Website: www.michigan.gov/dleg

(25,000 copies printed at \$3,803 or \$0.15 per copy.)

PRESORTED STANDARD
U.S. POSTAGE
LAUSING, MI
LAUSING, MI

Michigan Department of Labor & Economic Growth Michigan Occupational Safety & Health Administration P.O. Box 30643
7150 Harris Drive
Lansing, Michigan 48909-8143